i) hybridization of an oligonucleotide complementary to the conjugatable oligonucleotides;

ii) hybridization of the conjugatable oligonucleotides to each other; or

iii) ligation of the oligonucleotides,

wherein a signal is generated by nucleic acid amplification only when said second and third affinity reagents are closely bound on said macromolecule; wherein said macromolecule is a protein.

6. (Thrice Amended) An immunoassay for detection of a specific antigen, comprising:

a) contacting a sample suspected of containing said specific antigen with a first antibody linked to a solid support, said first antibody being specific for a first epitope on the antigen;

b) washing off excess sample;

c) incubating with a solution of a second and a third antibody specific for a second and a third epitope of said antigen, and modified with conjugatable oligonucleotides, wherein said oligonucleotides conjugate to each other when said second and third antibody are both bound to said antigen through

i) hybridization of an oligonucleotide complementary to the conjugatable oligonucleotides;

ii) hybridization of the conjugatable oligonucleotides

to each other; or

iii) ligation of the oligonucleotides;

d) washing off excess solution;

e) amplifying said conjugated oligonucleotides; and

f) detecting the amplified products.

8. (Thrice Amended) An immunoassay according to claim 6 [or 7], wherein the conjugation occurs through hybridization of [further comprising adding] an oligonucleotide complementary to the conjugatable oligonucleotides [before step d)].

9. (Twice Amended) An immunoassay according to claim 6, wherein the conjugation occurs through hybridization of the conjugatable oligonucleotides to each other [said conjugatable oligonucleotides are complementary].

10. (Amended) An immunoassay according to claim 8, wherein the conjugation occurs through ligation of the oligonucleotides [further comprising adding a ligase before step d)].